Racial and Ethnic Residential Housing Patterns in Places: 2000*

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Abstract

While considerable research has been conducted on racial and ethnic residential patterns in metropolitan areas, such patterns in "places" (also commonly referred to as towns and cities) have received much less attention. In this report, we examine residential housing patterns in places using five dimensions of residential segregation that have been developed in the professional literature (evenness, exposure, concentration, centralization, and clustering) for Blacks or African Americans, Hispanics or Latinos, Asians and Pacific Islanders (with separate estimates for Asians and Native Hawaiians and Other Pacific Islanders in an Appendix), and American Indians and Alaska Natives. Examining such patterns in places gives better insight into how residential patterns vary across the urban core, the suburbs, and places outside of metropolitan areas altogether. This report does not attempt to identify the causes of racial and ethnic residential patterns in places, nor do we argue that residential patterns is a more serious problem in one area than another. Overall, American Indians and Alaska Natives had the lowest index scores for places, followed by Asians and Pacific Islanders, Hispanics or Latinos, and then Blacks. Index scores for all groups were dramatically lower in suburban places in comparison with central cities and metropolitan areas as a whole.

Racial and Ethnic Residential Housing Patterns in Places: 2000

Residential housing patterns been the subject of considerable research for many years. An extensive tour through any major American city reveals that many neighborhoods are close to being racially and ethnically homogenous. In addition to controversies about the causes and consequences of differences in housing patterns (often referred to as residential segregation), there are substantial discussions as to how to best measure them. Massey and Denton (1988) identified 19 residential segregation indexes and used cluster analysis to distinguish five key dimensions: evenness, exposure, concentration, centralization, and clustering.

Based on Massey and Denton's recommendations and the behavior of these indexes in practice, we analyzed the extent of housing patterns using one index from each of the five dimensions. Using data from the decennial census, we explore not only Black/White residential segregation, but also the segregation of Hispanics, Asians and Pacific Islanders, and American Indians and Alaska Natives. Previous work on residential housing patterns has focused mostly on metropolitan areas. We extend previous work to consider places of 100,000 or more. It should be noted that housing patterns can result from many factors including voluntary choices people make about where they want to live or from the involuntary restriction of choices, such as through discrimination in the housing market. This report, however, does not attempt to identify the causes of residential patterns, nor do we argue that segregation is a more serious problem in one area than another. This report simply describes the extent of residential segregation in places (of 100,000 or more) in 2000.

The analysis proceeds as follows. We discuss the methodological challenges of defining places, metropolitan areas and neighborhoods; measuring race and ethnicity; and constructing

residential segregation indexes. We then describe the data, discuss our findings, and end with cross-group comparisons.

Methodological Issues

Areas and Units of Analysis

Residential segregation describes the distribution of different groups across units within a larger area. Thus, to measure residential segregation, we have to define both the appropriate area and its component parts (units of analysis). Regarding the larger area, this report focuses on "places" and compares place-based housing pattern scores to those of metropolitan areas. We present estimates for all places with over 100,000 in total population.

Places include census designated places (CDPs), consolidated cities, and incorporated places. CDPs are not incorporated, but are identifiable by name and are used as a means to provide census data for concentrations of population, housing, and commercial structures. They have no legal status, nor do they have officials elected to serve traditional municipal functions. For Census 2000 they did not need to meet a minimum population threshold (as was necessary in previous censuses). Incorporated places were legally in existence on January 1, 2000 under the laws of their states as cities, boroughs, city and boroughs, municipalities, towns, and villages, with a few exceptions. Consolidated cities are primary incorporated places which function as separate governments even though they have merged with its county or minor civil division (MCD) and are included in the consolidated government.¹

The Office of Management and Budget (OMB) officially defines metropolitan areas (MAs) as having a large population center (sometimes two or more) with a high degree of

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¹ More information on places is available at http://www.census.gov/geo/www/tiger/glossry2.pdf.

economic and social integration with adjacent communities.² They must contain either a place with a minimum population of 50,000 or a Census Bureau-defined urbanized area and a total MA population of at least 100,000 (75,000 in New England).³ There are often multiple places within metropolitan areas, and some small places are not in metropolitan areas at all. However, all places with populations of over 100,000 are located in metropolitan areas.

This analysis uses census tracts as the component parts, or units of analysis. Tracts are defined with local input, are intended to represent neighborhoods, and typically do not change much from census to census, except to subdivide. Census tracts are often chosen by other researchers (Massey and Denton, 1988; Iceland, Weinberg, and Steinmetz, 2002).

Defining Race and Hispanic Origin groups

One issue that arises when measuring residential housing patterns of races and ethnicities is choosing a reference group against which the housing patterns of other groups can be measured. We have chosen non-Hispanic Whites as the reference group—a common selection (Massey and Denton, 1988; Iceland, Weinberg, and Steinmetz, 2002). For 2000 data, when individuals can report more than one race, we have chosen individuals who designate White *alone* as their racial classification, and not Hispanic as their ethnicity. For each of the race/ethnicity analyses, we calculated the indexes using anyone who designated a racial group *alone* or *in combination* with another group (or groups).⁴

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² OMB is introducing a substantially new concept for metropolitan areas, core-based statistical areas (CBSAs). New CBSAs are to be defined on the basis of results of Census 2000 by June 30, 2003.

³ More information on metropolitan areas is available at http://www.census.gov/geo/www/tiger/glossry2.pdf.

⁴ The alternative is to just use the number of people who marked the single racial/ethnic category alone. Using the latter method has little impact on estimates of African American metropolitan area segregation, and a modest effect on those of Asians and Pacific Islanders and American Indians and Alaska Natives (Iceland, Weinberg, and Steinmetz 2002). Since Hispanic ethnicity is registered via a separate question, people of Hispanic origin may be of any race (or multiple races) in this analysis. Thus, the race and ethnic categories used here are not mutually exclusive.

Measuring Residential Housing Patterns

Measuring differences in residential housing patterns by race has been the subject of extensive research for many years (Duncan and Duncan, 1955; Taeuber and Taeuber, 1965; Lieberson, 1980, 1981). Massey and Denton (1988) compiled, augmented, and compared a number of measures and used cluster analysis with 1980 census data on 60 metropolitan areas to identify five dimensions of residential segregation – evenness, exposure, concentration, centralization, and clustering. These five clusters were further broken down into 20 measures of segregation, 19 of which we have calculated.⁵

Basically, evenness involves the differential distribution of the subject population, exposure measures potential contact, concentration refers to the relative amount of physical space occupied, centralization indicates the degree to which a group is located near the center of an urban area, and clustering measures the degree to which minority group members live disproportionately in contiguous areas. Based on our assessment of the indexes, Massey and Denton's recommendations, and earlier research, we selected the following indexes to represent the five Massey-Denton dimensions: evenness-dissimilarity, exposure- isolation, concentration-delta, centralization- absolute centralization, and clustering- spatial proximity. We describe them below.

The most widely used measure of evenness, and the mostly widely used measure of residential segregation in general, is *dissimilarity*. Conceptually, dissimilarity, which ranges from 0 (complete integration) to 1 (complete segregation), measures the percent of a group's

⁵We omit an index which measures the proportion of the minority group residing in the central city of the metropolitan area. Massey and Denton (1988) note that this index, while quite simple to calculate, is a rather poor measure of segregation.

population that would have to change residence for each neighborhood to have the same percent of that group as the larger area overall.

The exposure measure we use, the *isolation index*, describes "the extent to which minority members are exposed only to one another" (Massey and Denton, 1988, p. 288) and is computed as the minority-weighted average of the minority proportion in each neighborhood. It also varies from 0 to 1. For ease of presentation, we sometimes refer to the general exposure dimension by its converse label, isolation, in the exposition below, as higher levels of isolation represent higher levels of segregation.

As the measure of concentration we chose *delta*. This index, which varies from 0 to 1, measures the proportion of a group's population which would have to move across neighborhoods to achieve a uniform density across the larger area. Massey and Denton's preferred concentration measure, relative concentration, does not conform well to theoretical constraints, having several calculated values below -1.

Absolute centralization examines only the distribution of the minority group around the center and varies between -1 and 1. Positive values indicate a tendency for group members to reside close to the city center, while negative values indicate a tendency to live in outlying areas as compared to the reference group. A score of 0 means that a group has a uniform distribution throughout the larger area.

Finally, the clustering measure used here, *spatial proximity*, basically measures the extent to which neighborhoods inhabited by minority members adjoin one another, or cluster, in space. Spatial proximity equals 1 if there is no differential clustering between minority and majority group members. It is greater than 1 when members of each group live nearer to one another than

to members of the other group, and is less than 1 in the rare case that minority and majority members lived nearer to members of the other group than to members of their own group.

Data

The data for this analysis were drawn from the Census 2000 Summary File 1 data giving population counts for all racial groups and for Hispanics by census tract in all places. We present data for places (also called towns and cities), as well as metropolitan areas for comparison, with at least 100,000 total population. There were 311 MSAs and 245 places with total populations of at least 100,000 in our analysis, with 67 places in the suburbs and 178 central cities. We present some estimates at aggregate summary levels – for all U.S. places. Random factors and geocoding errors are more likely to play a large role in determining the settlement pattern of group members when fewer members are present, causing these indexes to contain greater variability.

There is no sampling error and conventional tests of significance do not apply in this analysis because the base data are from the decennial census short form. Any criteria adopted to discern substantive, rather than statistical, differences in segregation scores are inevitably somewhat arbitrary. In this report, it has been designated that substantively noteworthy index differences as those that are more than 1 percent of the range of the index estimates for places for the group in question.

Results

Our findings describe the extent of residential housing patterns in places for each racial and ethnic group. They do not identify the causes of residential patterns, nor is it argued that segregation is a more serious problem in one area than another. Our findings are first presented

for Blacks or African Americans, followed by Hispanics or Latinos, Asians, Native Hawaiians, and Other Pacific Islanders, and lastly American Indians and Alaska Natives.

Blacks or African Americans

Table 1 describes the residential housing patterns of African Americans, comparing scores for places and entire metropolitan areas. According to the index of dissimilarity, residential patterns for African Americans were not that different in places and MAs; about 64 percent of the group population would need to change residence in order to have an even distribution in both types of areas⁶. According to the isolation index, Blacks were less likely to share common neighborhoods with non-Hispanic Whites in places than in MAs, and particularly less so in central cities. Central cities also had a higher concentration of blacks in neighborhoods than in suburban places; however, MAs had a higher index, showing more densely packed Blacks in neighborhoods (delta). The amount of centralization was dramatically lower in places than in MAs as Blacks were relatively more likely to live near the outer edges of a place, but more likely to live toward the center of an MA (absolute centralization). Blacks were also more likely to live near other blacks in MAs than in suburban places in particular (spatial proximity).

(Table 1 here)

Table 2 describes residential housing patterns using the five indexes by region, population size, and percent of the population that was Black. The Northeast, with four of the five indexes having the highest scores, was the least likely to have the group population be evenly spread across places (dissimilarity), share common neighborhoods with non-Hispanic Whites (isolation) and most likely to be densely packed in certain areas (delta), and to live near

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⁶ Differences of more than .007 for Dissimilarity, .009 for Isolation, .007 for Delta, .012 for ACE, and .006 for Spatial Proximity were considered to be substantively significant.

other African Americans (spatial proximity). In contrast, Blacks in the West were more likely to be evenly distributed across places, more likely to come into contact with non-Hispanic Whites, and less centralized at the city center. The West, which contained 96 of the 245 places, had a lower-than-average score on four of the five indexes, with a score similar to the average for the delta index.

(Table 2 here)

The larger the population, the higher the index scores according to four of the five measures (the exception being the absolute centralization index). Places where Blacks constituted under 3.9 percent of the population (the lowest quartile) had the lowest levels of residential segregation according to all five measures. As the Black population increased, so did the index scores for three of the five indexes. Blacks became more unevenly spread across places (dissimilarity), less likely to come into contact with non-Hispanic Whites (isolation), and more likely to live near other Blacks (spatial proximity).

Hispanics or Latinos

Table 3 displays residential housing patterns for Hispanics in places and how they compare to metropolitan areas. Hispanics had different dissimilarity index scores in both places and MAs, with about half of the group population needed to change their area of residence to be evenly distributed⁷. Hispanics in places had more contact with other Hispanics in comparison to MAs (isolation). The spatial proximity index was different for both areas, with MAs being slightly higher. The delta and absolute centralization index was much lower in places, indicating that Hispanics are less concentrated in dense areas and less likely to be at the urban core of a

⁷ Differences of more than .006 for Dissimilarity, .010 for Isolation, .007 for Delta, .011 for ACE, and .004 for Spatial Proximity were considered to be substantively significant.

place than MAs. In places, central cities had higher index values for all five indexes than places in suburbs.

(Table 3 here)

Table 4 has summary statistics by region, population size, and percent of Hispanics. The dissimilarity, delta, and spatial proximity index were lowest in the West and South, where more than three-quarters of the Hispanic population resides. The Northeast, which has 14.9 percent of the Hispanic population, had the highest index values for four of the five indexes, with the Delta index not that different from the Midwest. As the population of a place increased in size, Hispanics became more unevenly spread across a place (dissimilarity), less likely to share common neighborhoods with non-Hispanic whites (isolation), more concentrated in dense areas (delta), and more likely to live near other Hispanics (spatial proximity). As the percentage of the population that was Hispanic increased, from 0 to 28.3 percent, so did the dissimilarity, isolation, delta, and spatial proximity scores. However, the scores in the highest quartile of percent of the population that was Hispanic (over 28.3 percent), had lower scores than the third quartile for four of the five measures.

(Table 4 here)

Asians, Native Hawaiians, and Other Pacific Islanders

Table 5 presents summary statistics on housing patterns for Asians and Pacific Islanders, comparing the five indexes for places and for MAs. The Asian and Pacific Islander groups were combined into one group in this analysis because of the small number of Pacific Islanders in most places⁸. The table shows that places had lower scores for 4 of the 5 indexes compared to

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⁸ Appendix A includes two tables for Asians and for Native Hawaiians and Other Pacific Islanders of residential housing pattern indexes by geography and selected characteristics in 2000.

MAs, with isolation higher for places⁹. In comparison to places in the suburbs, central cities had higher scores across all 5 indexes.

(Table 5 here)

The Northeast, with 25 of the 245 places, had a higher than average score on four of the five indexes, and was close to the overall average for the last (spatial proximity). The West, with over 49 percent of the Asian and Pacific Islander population, the highest proportion of the four regions, had below average scores for three of the five indexes, and highest for the isolation and spatial proximity indexes.

(Table 6 here)

Overall, larger places generally had higher levels of segregation. Places with 1 million or more in total population had higher index scores than smaller places across all five indexes. As the percentage of the Asian population increased, so did index scores for two of the five indexes. Places that were under 2.3 percent Asian and Pacific Islander (the lowest quartile) had lower than average index scores for four of the five indexes and was not different from the absolute centralization index. The isolation index was particularly low for places with less than 8.0 percent of the Asian population, indicating that Asians and Pacific islanders had high exposure to non-Hispanic Whites and were more likely to share common neighborhoods with them.

American Indians and Alaska Natives

Table 7 presents summary statistics on residential housing patterns of American Indians and Alaska Natives. The table shows that MAs and places had similar dissimilarity and isolation

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⁹ Differences of more than .005 for Dissimilarity, .008 for Isolation, .008 for Delta, .012 for ACE, and .002 for Spatial Proximity were considered to be substantively significant.

scores, with place-based scores being higher¹⁰. The spatial proximity index was also lower for places. Places in central cities had substantially higher levels of residential segregation for all five indexes than places in the suburbs. Results from this table and previous research on metropolitan area housing patterns (see Iceland, Weinberg, and Steinmetz 2002) indicate that scores for American Indian and Alaska Natives vis-à-vis non-Hispanic Whites are generally lower than scores for the other four racial and ethnic groups.

(Table 7 here)

The difference between MAs and place scores is bigger for the delta and absolute centralization indexes. For these two indexes, the place-based scores were lower, indicating American Indians and Alaska Natives are less centralized and in less dense neighborhoods vis-àvis non-Hispanic Whites in places than in MAs.

Table 8 shows residential housing pattern indexes by region, population size, and percent of the population that reported being American Indian and Alaska Native. The Midwest, which contained 44 of the 245 places, had a lower-than-average score on four of the five indexes, and was similar to the average for dissimilarity. The Northeast had a higher than average score on four of the five indexes and a below average score according to one (absolute centralization).

(Table 8 here)

With the exception of the absolute centralization index, the nine places having total populations of one million or more had higher segregation for American Indians and Alaska Natives than did smaller places¹¹. No clear pattern between segregation and quartiles of percent American Indian and Alaska Native was evident.

¹⁰ Differences of more than .006 for Dissimilarity, .005 for Isolation, .008 for Delta, .010 for ACE, and .0004 for Spatial Proximity were considered to be substantively significant.

The nine places with total populations of one million or more include Chicago, IL; Dallas, TX; Los Angeles, CA; New York City, NY; Philadelphia, PA; Phoenix, AZ; San Antonio, TX; and San Diego, CA.

Cross-Group Comparisons

There were some similarities in residential patterns by race/ethnicity across measures. All racial and ethnic groups had higher index scores in central cities than suburbs. The dissimilarity and isolation index were generally higher in central cities than in MAs. Blacks or African Americans had the highest scores for 4 of the 5 indexes in all places. Overall, levels of segregation experienced by African Americans remained high in comparison to the other groups across most measures. Hispanics generally had the next highest scores, followed by Asians and Pacific Islanders, and then American Indians and Alaska Natives across a majority of the measures.

The Northeast region had the highest housing pattern scores across most of the indexes for all groups. For the most part, when population size of a place grew, housing pattern scores increased. Again, the same pattern can be seen with Blacks having the highest housing pattern scores, followed by Hispanics, Asians, and American Indians for the majority of the indexes.

While there was no clear pattern observed between housing patterns and quartiles of percent American Indian and Alaska Native, for Blacks and Asian and Pacific Islanders, as the population of the group increased from the lowest to the highest quartile, housing pattern scores increased for three of the five indexes. For Hispanics, while scores were highest for places with between 14.1 and 28.3 percent Hispanics (the third quartile), there was a slight decrease in scores for places with over 28.3 percent Hispanic (the highest quartile) for three of the five indexes.

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Table 1. Residential Housing Pattern Indexes for Blacks or African Americans, by Geography: 2000

| | | Metropolitan Statistical Areas (MSAs) | | |
|-------------------------------|------------|--|--------------------|----------|
| Index | 245 Places | 178 Central Cities | 67 Suburban Places | 311 MSAs |
| Dissimilarity Index | 0.6423 | 0.6577 | 0.3279 | 0.6402 |
| Isolation Index | 0.7093 | 0.7254 | 0.3809 | 0.5910 |
| Delta Index | 0.5123 | 0.5163 | 0.4307 | 0.7926 |
| Absolute Centralization Index | 0.2504 | 0.2517 | 0.2238 | 0.7223 |
| Spatial Proximity Index | 1.2932 | 1.3052 | 1.0492 | 1.3740 |

Note: Places and metropolitan areas must have 10 or more tracts and 100,000 or more total population. Lower values indicate less segregation; the reference group is non-Hispanic Whites. Blacks or African Americans refers to Blacks or African Americans alone or in combination population. Segregation estimates are weighted by the size of the Black or African American alone or in combination population. MSA/PMSAs defined as of June 30, 1999.

Table 2. Residential Housing Pattern Indexes for Blacks or African Americans, by Selected Characteristics: 2000

| (Weighted Averages) Characteristic | Number of Places | Dissimilarity Index | Isolation Index | Delta Index | Absolute Centralization Index | Spatial Proximity Index |
|------------------------------------|---------------------|---------------------|-----------------|-------------|-------------------------------------|-------------------------|
| All Places | 245 | 0.6423 | 0.7093 | 0.5123 | 0.2504 | 1.2932 |
| Region | | | | | | |
| Northeast | 25 | 0.7504 | 0.8002 | 0.5850 | 0.2663 | 1.3521 |
| Midwest | 44 | 0.6736 | 0.7619 | 0.4702 | 0.2053 | 1.3225 |
| South | 80 | 0.6099 | 0.7017 | 0.4932 | 0.2755 | 1.2713 |
| West | 96 | 0.4772 | 0.4574 | 0.5171 | 0.2296 | 1.1926 |
| Population Size | | | | | | |
| 1 Million + | 9 | 0.7768 | 0.8097 | 0.5920 | 0.2037 | 1.4527 |
| 500,000-999,999 | 20 | 0.6275 | 0.7381 | 0.4568 | 0.2669 | 1.2282 |
| Under 500,000 | 216 | 0.5537 | 0.6236 | 0.4830 | 0.2756 | 1.2116 |
| Percent Black or African American | Group (Quartiles |) | | | | |
| Under 3.9 percent | 62 | 0.2791 | 0.1029 | 0.4291 | 0.2058 | 1.0189 |
| 3.9 percent – 12.9 percent | 61 | 0.5050 | 0.4263 | 0.5267 | 0.2498 | 1.2180 |
| 12.9 percent - 28.1 percent | 60 | 0.5598 | 0.5758 | 0.5245 | 0.2937 | 1.2437 |
| Over 28.1 percent | 62 | 0.6972 | 0.8081 | 0.5081 | 0.2381 | 1.3262 |

Note: All calculations use Census 2000 data. Includes 245 places with 10 or more tracts and 100,000 or more total population. Lower values indicate less segregation; the reference group is non-Hispanic Whites. Black or African American refers to the Black or African American alone or in combination population. Segregation estimates are weighted by the size of the Black or African American alone or in combination population. Source: U.S. Census Bureau, Census 2000 Summary File 1.

Table 3. Residential Housing Pattern Indexes for Hispanics or Latinos, by Geography: 2000

| | Places | | | | |
|-------------------------------|------------|--------------------|--------------------|----------|--|
| Index | 245 Places | 178 Central Cities | 67 Suburban Places | 311 MSAs | |
| Dissimilarity Index | 0.496 | 0.535 | 0.297 | 0.509 | |
| Isolation Index | 0.641 | 0.649 | 0.599 | 0.553 | |
| Delta Index | 0.501 | 0.524 | 0.386 | 0.764 | |
| Absolute Centralization Index | 0.283 | 0.297 | 0.212 | 0.689 | |
| Spatial Proximity Index | 1.189 | 1.215 | 1.055 | 1.232 | |

Note: Places and metropolitan areas must have 10 or more tracts and 100,000 or more total population. Lower values indicate less segregation; the reference group is non-Hispanic Whites. Segregation estimates are weighted by the size of the Hispanic or Latino population. MSA/PMSAs defined as of June 30, 1999.

Table 4. Housing Pattern Indexes for Hispanics or Latinos, by Selected Characteristics: 2000

| (Weighted Averages) Characteristic | Number of Places | Dissimilarity Index | Isolation Index | Delta Index | Absolute Centralization Index | Spatial Proximity Index |
|------------------------------------|------------------|------------------------|-----------------|-------------|-------------------------------------|----------------------------|
| All Places | 245 | 0.496 | 0.641 | 0.501 | 0.283 | 1.189 |
| Region | | | | | | |
| Northeast | 25 | 0.606 | 0.685 | 0.570 | 0.299 | 1.255 |
| Midwest | 44 | 0.531 | 0.519 | 0.571 | 0.327 | 1.196 |
| South | 80 | 0.455 | 0.658 | 0.468 | 0.327 | 1.164 |
| West | 96 | 0.471 | 0.634 | 0.482 | 0.242 | 1.177 |
| Population Size | | | | | | |
| 1 Million + | 9 | 0.621 | 0.731 | 0.563 | 0.271 | 1.299 |
| 500,000-999,999 | 20 | 0.497 | 0.577 | 0.537 | 0.382 | 1.175 |
| Under 500,000 | 216 | 0.379 | 0.571 | 0.434 | 0.272 | 1.088 |
| Percent Hispanic or Latino Grou | up (Quartiles) | | | | | |
| Under 4.9 percent | 61 | 0.332 | 0.129 | 0.463 | 0.311 | 1.028 |
| 4.9 percent - 14.1 percent | 61 | 0.438 | 0.311 | 0.523 | 0.326 | 1.114 |
| 14.1 percent - 28.3 percent | 61 | 0.551 | 0.595 | 0.553 | 0.282 | 1.225 |
| Over 28.3 percent | 62 | 0.481 | 0.731 | 0.471 | 0.277 | 1.186 |

Note: All calculations use Census 2000 data. Includes 245 places with 10 or more tracts and 100,000 or more total population. Lower values indicate less segregation; the reference group is non-Hispanic Whites. Segregation estimates are weighted by the size of the Hispanic or Latino population.

Table 5. Residential Housing Pattern Indexes for Asians and Pacific Islanders, by Geography: 2000

| | | Places | | Metropolitan Statistical Areas (MSAs) |
|-------------------------------|------------|--------------------|--------------------|--|
| Index | 245 Places | 178 Central Cities | 67 Suburban Places | 311 MSAs |
| Dissimilarity Index | 0.372 | 0.397 | 0.237 | 0.411 |
| Isolation Index | 0.381 | 0.391 | 0.332 | 0.307 |
| Delta Index | 0.473 | 0.496 | 0.355 | 0.743 |
| Absolute Centralization Index | 0.209 | 0.229 | 0.105 | 0.683 |
| Spatial Proximity Index | 1.076 | 1.085 | 1.030 | 1.097 |

Note: Places and metropolitan areas must have 10 or more tracts and 100,000 or more total population. Lower values indicate less segregation; the reference group is non-Hispanic Whites. Asians and Pacific Islanders refers to Asian and Pacific Islander alone or in combination population. Segregation estimates are weighted by the size of the Asian and Pacific Islander alone or in combination population. MSA/PMSAs defined as of June 30, 1999.

Table 6. Residential Housing Pattern Indexes for Asian and Pacific Islander, by Selected Characteristics: 2000

| (Majabtad Averages) | Ni mahan af | Dissimilarity | | | Absolute | Constinu |
|---------------------------------|----------------|---------------|-----------------|-------------|----------------|-----------------|
| (Weighted Averages) | Number of | Dissimilarity | loolotion Indov | Dalta Inday | Centralization | Spatial |
| Characteristic | Places | Index | Isolation Index | Delta Index | Index | Proximity Index |
| All Places | 245 | 0.372 | 0.381 | 0.473 | 0.209 | 1.076 |
| Region | | | | | | |
| Northeast | 25 | 0.463 | 0.412 | 0.566 | 0.324 | 1.078 |
| Midwest | 44 | 0.387 | 0.200 | 0.490 | 0.180 | 1.047 |
| South | 80 | 0.327 | 0.161 | 0.487 | 0.213 | 1.041 |
| West | 96 | 0.347 | 0.449 | 0.434 | 0.171 | 1.088 |
| Population Size | | | | | | |
| 1 Million + | 9 | 0.465 | 0.416 | 0.563 | 0.252 | 1.120 |
| 500,000-999,999 | 20 | 0.391 | 0.397 | 0.464 | 0.176 | 1.094 |
| Under 500,000 | 216 | 0.301 | 0.352 | 0.415 | 0.191 | 1.040 |
| Percent Asian and Pacific Islar | nder Group (Qu | ıartiles) | | | | |
| Under 2.3 percent | 61 | 0.314 | 0.097 | 0.443 | 0.198 | 1.017 |
| 2.3 percent – 3.8 percent | 62 | 0.302 | 0.113 | 0.484 | 0.248 | 1.022 |
| 3.8 percent – 8.0 percent | 60 | 0.330 | 0.192 | 0.484 | 0.199 | 1.043 |
| Over 8.0 percent | 62 | 0.395 | 0.482 | 0.471 | 0.208 | 1.095 |

Note: All calculations use Census 2000 data. Includes 245 places with 10 or more tracts and 100,000 or more total population. Lower values indicate less segregation; the reference group is non-Hispanic Whites. Asian and Pacific Islander refers to the Asian and Pacific Islander alone or in combination population. Segregation estimates are weighted by the size of the Asian and Pacific Islander alone or in combination population.

Table 7. Residential Housing Pattern Indexes for American Indians and Alaska Natives, by Geography: 2000

| | | Places | | Metropolitan Statistical Areas (MSAs) |
|-------------------------------|---------------------|-----------------------------|-----------------------------|--|
| Index | 245 Diagon | 179 Control Citios | 67 Suburban Places | 211 MSA |
| Dissimilarity Index | 245 Places 0.359 | 178 Central Cities 0.377 | 67 Suburban Places 0.227 | 311 MSAs 0.333 |
| Isolation Index | 0.339 | 0.377 | 0.064 | 0.333 |
| Delta Index | 0.442 | 0.449 | 0.387 | 0.103 |
| Absolute Centralization Index | 0.289 | 0.300 | 0.213 | 0.610 |
| Spatial Proximity Index | 1.015 | 1.016 | 1.005 | 1.077 |

Note: Places and metropolitan areas must have 10 or more tracts and 100,000 or more total population. Lower values indicate less segregation; the reference group is non-Hispanic Whites. American Indians and Alaska Natives refers to American Indians and Alaska Natives alone or in combination population. Segregation estimates are weighted by the size of the American Indian and Alaska Native alone or in combination population. MSA/PMSAs defined as of June 30, 1999.

Table 8. Residential Housing Pattern Indexes for American Indians and Alaska Natives, by Selected Characteristics: 2000

| (Weighted Averages) | Number of | Dissimilarity | | | Absolute Centralization | Spatial |
|-----------------------------|---------------|----------------|-----------------|-------------|----------------------------|-----------------|
| Characteristic | Places | Index | Isolation Index | Delta Index | Index | Proximity Index |
| All Places | 245 | 0.359 | 0.112 | 0.442 | 0.289 | 1.015 |
| Region | | | | | | |
| Northeast | 25 | 0.570 | 0.216 | 0.501 | 0.265 | 1.020 |
| Midwest | 44 | 0.354 | 0.083 | 0.382 | 0.234 | 1.009 |
| South | 80 | 0.308 | 0.081 | 0.423 | 0.315 | 1.010 |
| West | 96 | 0.326 | 0.106 | 0.452 | 0.300 | 1.017 |
| Population Size | | | | | | |
| 1 Million + | 9 | 0.529 | 0.189 | 0.499 | 0.269 | 1.025 |
| 500,000-999,999 | 20 | 0.323 | 0.087 | 0.441 | 0.332 | 1.011 |
| Under 500,000 | 216 | 0.294 | 0.085 | 0.417 | 0.286 | 1.011 |
| Percent American Indian and | Alaska Native | Group (Quartil | es) | | | |
| Under 0.8 percent | 62 | 0.377 | 0.077 | 0.399 | 0.254 | 1.006 |
| 0.8 percent - 1.1 percent | 60 | 0.451 | 0.145 | 0.455 | 0.252 | 1.014 |
| 1.1 percent - 1.7 percent | 61 | 0.352 | 0.105 | 0.418 | 0.237 | 1.015 |
| Over 1.7 percent | 62 | 0.304 | 0.104 | 0.460 | 0.354 | 1.017 |

Note: All calculations use Census 2000 data. Includes 245 places with 10 or more tracts and 100,000 or more total population. Lower values indicate less segregation; the reference group is non-Hispanic Whites. American Indian and Alaska Native refers to the American Indian and Alaska Native alone or in combination population. Segregation estimates are weighted by the size of the American Indian and Alaska Native alone or in combination population. Source: U.S. Census Bureau, Census 2000 Summary File 1.

Appendix

Table A1. Residential Housing Pattern Indexes for Asians, by Geography: 2000

| | | Metropolitan Statistical Areas (MSAs) | | |
|-------------------------------|------------|--|--------------------|----------|
| Index | 245 Places | 178 Central Cities | 67 Suburban Places | 311 MSAs |
| Dissimilarity Index | 0.375 | 0.400 | 0.242 | 0.416 |
| Isolation Index | 0.377 | 0.387 | 0.328 | 0.301 |
| Delta Index | 0.478 | 0.501 | 0.357 | 0.746 |
| Absolute Centralization Index | 0.208 | 0.228 | 0.104 | 0.687 |
| Spatial Proximity Index | 1.077 | 1.086 | 1.031 | 1.098 |

Note: Places and metropolitan areas must have 10 or more tracts and 100,000 or more total population. Lower values indicate less segregation; the reference group is non-Hispanic Whites. Asians and Pacific Islanders refers to Asian and Pacific Islander alone or in combination population. Segregation estimates are weighted by the size of the Asian and Pacific Islander alone or in combination population. MSA/PMSAs defined as of June 30, 1999.

Table A2. Residential Housing Pattern Indexes for Asians, by Selected Characteristics: 2000

| (Weighted Averages) | Number of | Dissimilarity | | | Absolute Centralization | Spatial |
|--------------------------------|-----------|---------------|-----------------|-------------|----------------------------|-----------------|
| Characteristic | Places | Index | Isolation Index | Delta Index | Index | Proximity Index |
| All Places | 245 | 0.375 | 0.377 | 0.478 | 0.208 | 1.077 |
| Region | | | | | | |
| Northeast | 25 | 0.463 | 0.410 | 0.573 | 0.325 | 1.079 |
| Midwest | 44 | 0.392 | 0.200 | 0.496 | 0.177 | 1.048 |
| South | 80 | 0.331 | 0.160 | 0.493 | 0.212 | 1.041 |
| West | 96 | 0.349 | 0.444 | 0.436 | 0.168 | 1.090 |
| Population Size | | | | | | |
| 1 Million + | 9 | 0.467 | 0.414 | 0.570 | 0.253 | 1.122 |
| 500,000-999,999 | 20 | 0.394 | 0.396 | 0.469 | 0.176 | 1.094 |
| Under 500,000 | 216 | 0.303 | 0.344 | 0.416 | 0.188 | 1.040 |
| Percent Asian Group (Quartiles | s) | | | | | |
| Under 2.1 percent | 62 | 0.317 | 0.091 | 0.453 | 0.195 | 1.017 |
| 2.1 percent – 3.6 percent | 61 | 0.308 | 0.112 | 0.494 | 0.252 | 1.022 |
| 3.6 percent – 7.4 percent | 61 | 0.339 | 0.192 | 0.499 | 0.205 | 1.045 |
| Over 7.4 percent | 61 | 0.395 | 0.474 | 0.472 | 0.205 | 1.096 |

Note: All calculations use Census 2000 data. Includes 245 places with 10 or more tracts and 100,000 or more total population. Lower values indicate less segregation; the reference group is non-Hispanic Whites. Asian refers to the Asian alone or in combination population. Segregation estimates are weighted by the size of the Asian alone or in combination population. Source: U.S. Census Bureau, Census 2000 Summary File 1.

Table A3. Residential Housing Pattern Indexes for Native Hawaiian and Other Pacific Islanders, by Geography: 2000

| | | Metropolitan Statistical Areas (MSAs) | | |
|-------------------------------|------------|--|--------------------|----------|
| Index | 245 Places | 178 Central Cities | 67 Suburban Places | 311 MSAs |
| Dissimilarity Index | 0.398 | 0.428 | 0.254 | 0.427 |
| Isolation Index | 0.162 | 0.186 | 0.048 | 0.205 |
| Delta Index | 0.495 | 0.510 | 0.423 | 0.712 |
| Absolute Centralization Index | 0.234 | 0.239 | 0.209 | 0.581 |
| Spatial Proximity Index | 1.019 | 1.022 | 1.005 | 1.050 |

Note: Places and metropolitan areas must have 10 or more tracts and 100,000 or more total population. Lower values indicate less segregation; the reference group is non-Hispanic Whites. Native Hawaiian and Other Pacific Islander refers to Native Hawaiian and Other Pacific Islander alone or in combination population. Segregation estimates are weighted by the size of the Native Hawaiian and Other Pacific Islander alone or in combination population. MSA/PMSAs defined as of June 30, 1999.

Table A4. Residential Housing Pattern Indexes for Native Hawaiian and Other Pacific Islanders, by Selected Characteristics: 2000

| (Weighted Averages) Characteristic | Number of Places | Dissimilarity Index | x Isolation Index | Delta Index | Absolute Centralization Index | Spatial Proximity Index |
|------------------------------------|---------------------|----------------------|-------------------|-------------|-------------------------------------|----------------------------|
| All Places | 245 | 0.398 | 0.162 | 0.495 | 0.234 | 1.019 |
| Region | | | | | | |
| Northeast | 25 | 0.570 | 0.075 | 0.559 | 0.292 | 1.003 |
| Midwest | 44 | 0.452 | 0.040 | 0.522 | 0.268 | 1.002 |
| South | 80 | 0.401 | 0.017 | 0.486 | 0.254 | 1.002 |
| West | 96 | 0.374 | 0.202 | 0.487 | 0.222 | 1.025 |
| Population Size | | | | | | |
| 1 Million + | 9 | 0.500 | 0.068 | 0.533 | 0.206 | 1.005 |
| 500,000-999,999 | 20 | 0.416 | 0.068 | 0.473 | 0.190 | 1.006 |
| Under 500,000 | 216 | 0.369 | 0.202 | 0.489 | 0.249 | 1.025 |
| Percent Native Hawaiian and Oth | ner Pacific Islande | ers Group (Quartiles |) | | | |
| Under 0.1 percent | 61 | 0.448 | 0.020 | 0.505 | 0.242 | 1.001 |
| 0.1 percent – 0.2 percent | 61 | 0.428 | 0.031 | 0.509 | 0.271 | 1.002 |
| 0.2 percent – 0.4 percent | 62 | 0.425 | 0.044 | 0.495 | 0.237 | 1.003 |
| Over 0.4 percent | 61 | 0.381 | 0.235 | 0.493 | 0.226 | 1.029 |

Note: All calculations use Census 2000 data. Includes 245 places with 10 or more tracts and 100,000 or more total population. Lower values indicate less segregation; the reference group is non-Hispanic Whites. Native Hawaiian and Other Pacific Islander refers to the Native Hawaiian and Other Pacific Islander alone or in combination population. Segregation estimates are weighted by the size of the Native Hawaiian and Other Pacific Islander alone or in combination population.